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EXAMINER

HWANG, VICTOR KENNY

ART UNIT PAPER NUMBER

3764

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/586,307

Applicant(s)

ROTH ET AL.

Examiner

Victor K. Hwang

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 89-106 is/are pending in the application.
- 4a) Of the above claim(s) 103-106 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16-25 and 89-102 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claims 11 and 92-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, the recitation of "decreased volume in the necked bladder(s)" is not clear because claim 10 is contradictory and indicates that each of the bladders has approximately the same inflated volume.

In claim 92, the recitation that "the necking seams are intended to decrease the inflated volume of the necked bladders" on lines 3-4 is not clear because claim 89 contradicts this recitation and indicates that each of the bladders have approximately the same inflated volume. Claims 93-95 depend from claim 92, and are likewise indefinite.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 9, 16, 23, 89-91, 99-102 are rejected under 35 U.S.C. 102(e) as being anticipated by *Sandman et al.* (US Pat. 6,080,120). *Sandman et al.* discloses a massage device for massaging a body part of a person. The massage device comprises a garment 310 for enclosing the body part and has a plurality of bladders 240,241,340-343 arranged on along the garment to massage body parts. Each of the bladders substantially encircles a portion of the body part. An inflation assembly 10 supplies fluid pressure to each of the bladders to inflate respective bladders. Pressures within the bladders are individually monitored and controlled by the inflation assembly and the pressures may be maintained at an equal level. In an alternative embodiment of the compression sleeve, each bladder of the sleeve may have a different volume which can be adapted to conform to the bladder location on the patient's limb (col. 6, lines 35-39). Thus, the main embodiment described has chambers of approximately the same volume. The garment is made of two opposing sheets of thermoplastic film wherein seams between the sheets define the bladders. Hook and loop-type fasteners are used to secure the garment to the patient's limb for a snug fit.

4. Claims 2, 3, 6, 7 and 102 are rejected under 35 U.S.C. 102(b) as being anticipated by *McWhorter* (US Pat. 5,263,473). *McWhorter*'473 discloses a massage device 20 for massaging a body part of a person. The massage device comprises a garment 26 for enclosing the body part and has a plurality of bladders 50,52 arranged along the garment to massage the body part. Each of the bladders substantially encircles a portion of the body part. An inflation assembly 22 supplies fluid pressure to each of the bladders to inflate the respective bladders. The garment is shaped to accommodate the lower leg portion of the user's body. The bottom

bladders 42 massage the user's foot and top bladders 40 massage the user's calf. A notch on at least one lateral side of the garment separates the bottom bladders 42 from the top bladders 40. Tubing 64,66 extend from a source of inflation fluid within controller 10 into a pocket formed between the sheets of material used to form the garment (see Fig. 3). The controller may be that disclosed in US Pat. 4,013,069, which provides for inflation of a bladder prior to complete deflation of the previously inflated bladder (see Fig. 8 of this patent incorporated by reference). The controller selectively inflates and deflates the bladders and also provides for exhaust lines 126,132,140 including throttling devices 124,130,138.

5. Claims 6, 8 and 102 are rejected under 35 U.S.C. 102(b) as being anticipated by *McEwen et al.* (US Pat. 5,843,007). *McEwen et al.* discloses a massage device for massaging a body part of a person. The massage device comprising a garment for enclosing the body part, the garment having a plurality of bladders arranged along the garment to massage the body part. Each of the bladders substantially encircles a portion of the body part. The garment shown is for the foot and calf of a person. An inflation assembly 2 selectively inflates and deflates the bladders. The inflation assembly includes a zone selector 22 operated to allow a user to select a certain zone of the garment. In this instance, the zones are identified as channel *A* and channel *B*. The channels operate independently and may generate different or similar pressure waveforms, as determined by the operator.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-13 and 89-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandman et al.* (US Pat. 6,080,120) in view of *Whitney* (US Pat. 4,597,384). *Sandman et al.* has been discussed above, and such discussion is incorporated herein. *Sandman et al.* discloses the invention as claimed except for necking seams positioned relative to certain bladders (claims 10 and 92) without changing the overall shape of the bladder (claims 12 and 93) from a substantially rectangular shape (claims 13 and 94).

*Whitney*'384 discloses a massage device comprising a garment for enclosing a body part, the garment having a plurality of bladders 74,76,78,80 arranged along the garment to massage the body part, each of the bladders substantially encircling a portion of the body part. An inflation assembly may be provided to supply fluid pressure to each of the bladders to inflate the respective bladders in a selected sequential manner. Necking seams 126,130,146,148 are positioned relative to certain bladders. The necking seams provide a smooth pressure flow with no pressure gaps extending completely around the patient's limb (col. 1, lines 47-51). The necking seams do not change the overall rectangular shape of the bladders.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the bladders of *Sandman et al.* with the necking seams of *Whitney*'384, in order to provide a smooth pressure flow with no pressure gaps extending completely around the patient's limb as taught by *Whitney*'384.

8. Claims 1, 9, 16-18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandman et al.* (US Pat. 6,080,120) in view of *Takeuchi et al.* (US Pat. 6,203,510). *Sandman et al.* has been discussed above, and such discussion is incorporated herein. *Sandman et al.* discloses the invention as claimed except for the sheets being made of urethane (claim 17); and the outer sheet is urethane film on a laminate and the inner sheet is unsupported urethane film (claim 18).

*Takeuchi et al.* discloses a garment for enclosing a body part, the garment having a plurality of bladders 2,3,4 arranged along the garment to massage a body part, each bladder substantially encircling a portion of the body part. The garment is constructed of two sheets 1a and 1b of a synthetic resin such as urethane resin or polyvinyl chloride resin. Thus, urethane and polyvinyl chloride are equivalent materials used in the construction of inflatable bladders. The sheets are externally unsupported sheets. The sheets of *Sandman et al.* are disclosed as made of polyvinyl chloride (PVC) and are supported on a laminate to provide comfort and a means for securing the ends of the garment for a snug fit around the limb.

It would have been obvious to one having ordinary skill in the art at the time the invention was made that the sheets of *Sandman et al.* be made of urethane film, since *Takeuchi et al.* discloses that such materials are equivalent to the PVC disclosed by *Sandman et al.* and

that the sheets may be unsupported sheets, since providing a laminate support is a design choice as to whether added comfort is to be provided for the user in laminating a fabric material to the inner sheet.

9. Claims 1, 9, 16, 19-23, 89-91 and 96-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandman et al.* (US Pat. 6,080,120) in view of *McWhorter* (US Pat. 5,263,473). *Sandman et al.* and *McWhorter*'473 have been discussed above, and such discussion is incorporated herein. *Sandman et al.* discloses the invention as claimed except for the sheets of the garment having an opening to receive a user's heel (claim 19); the sheets having a notch on each lateral side separating bottom bladders that massage the user's foot and top bladders that massage the user's calf (claims 20, 22, 96 and 98); the garment including a pocket having an opening communicating with respective bladders and wherein the tubing extends from a source of inflation fluid into the pocket (claims 21 and 97); and wherein the pocket includes one or more slots adjacent the notches (claims 22 and 98).

*McWhorter*'473 discloses that a lower limb garment may include bottom bladders 50 for massaging a user's foot and that the foot portion be separated by an notch opening to receive the user's heel. Pockets are formed in the garment to receive tubing for inflation and deflation of the bladders. Slots are located adjacent the notch to provide openings into the pocket for the tubing. *McWhorter*'473 also teaches that a unitary sleeve having a leg portion and a foot portion may instead be separate sleeves encompassing the respective limb portions where compression is to be applied (col. 5, lines 41-46). Inflation of the foot portion enhances the movement of blood (col. 2, lines 51-54).



It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the garment of *Sandman et al.* with a notched, bottom bladder since *McWhorter*'473 teaches that providing a foot massaging portion enhances the movement of blood. The notches provide for a better fit and are equivalent to garments wherein the bladders are on separate sleeves. The pockets and slots are obvious design choices and represent well known construction methods in the art of inflatable massage devices.

10. Claims 1, 4, 9, 16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sandman et al.* (US Pat. 6,080,120) in view of *Gelfand et al.* (US Pat. 5,769,800) and *Arkans*'961 (US Pat. 4,198,961). *Sandman et al.* has been discussed above, and such discussion is incorporated herein. *Sandman et al.* discloses a garment secured to a user's limb by hook and loop-type fasteners. Hook material 213, 313 is located at a lateral edge of the garment and loop-type fabric material 212 extends across the remaining outer surface area of the sleeve 210. *Sandman et al.* does not disclose the loop fastening strip secured to the inner sheet laterally inward from pull handles and over and laterally beyond a tubing pocket and the hook fastening strip secured to the outer sheet adjacent its longitudinal edge (claims 4, 24 and 25).

*Gelfand et al.* discloses massage device for massaging a body part of a person. The massage device comprises a garment 10 for enclosing the body part, the garment having a bladder 22 supplied fluid pressure by an inflation assembly 40. The garment is snugly fit to the user's body part by means of hook and loop fasteners enhanced by a most peripheral pull handle 20 for added leverage in wrapping the garment about the user's body part. The pull

handle is used to assist in applying the garment around the patient (col. 2, lines 59-60). Loop fastener material 14 is secured to the inner polyurethane sheet of the garment and laterally inward from the pull handle 20. Hook fastener material 16 is secured to the outer polyurethane sheet of the garment.

It would have been obvious to one having ordinary skill in the art at the time the invention made to provide the garment of *Sandman et al.* with the pull handle and hook and loop placement of *Gelfand et al.*, in order to enhance the ability to provide a snug fit of the garment to the user's body part by providing added leverage to wrapping of the garment about the user's body part. Additionally, regarding the placement of the hook and loop fastener material on the outer and inner surfaces of the garment, the reversal of components in a prior art reference, where there is no disclosed significance to such reversal, is a design consideration within the skill of the art. *In re Gazda*, 219 F.2d 449, 104 USPQ 400 (CCPA 1955); *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

*Arkans '961* discloses a massage device comprising a garment wherein the tubing is retained within a tubing pocket. The tubing pocket protects the tubing from excessive strain during use. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a tubing pocket for the tubing of *Sandman et al.* as modified by *Gelfand et al.* to protect the tubing from excessive strain as taught by *Arkans '961*.

### ***Response to Arguments***

11. Applicant's arguments filed October 12, 2004 have been fully considered but they are not persuasive. Applicant argues that with regard to claim 10, none of the cited references,

either alone or in combination, teach or suggest providing *necking seams* positioned relative to certain bladders in order to provide at least some of the bladders *approximately the same inflated volume*. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

*Sandman et al.* discloses in the drawings that chambers 240,241 are approximately the same inflated volume. *Whitney* discloses chambers having necked seams to provide a smooth pressure flow with no pressure gaps extending completely around the patient's limb (col. 1, lines 47-51). *Whitney* provides motivation to provide the chambers of *Sandman et al.* with necked seams. It is not required that the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. See *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970).

Applicant's reliance on the whereby clauses "whereby substantially even inflation timing, with substantially even applied pressure, and , thus overall smooth massage dynamics may be provided without overly complicated inflation fluid control" and "whereby substantially even inflation timing, with substantially even applied pressure, and, thus, overall

smooth massage dynamics may be provided without overly complicated inflation fluid control” in claim 10 does not define around the prior art cited. The prior art, as combined, satisfies the functional requirements of the whereby statements. The functional statement set forth in a “whereby” clause does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. *In re Mason*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974).

#### ***Allowable Subject Matter***

12. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 95 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (571) 272-4976. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time.

The facsimile number for submitting papers directly to the examiner for informal correspondence is (571) 273-4976. The facsimile number for submitting all formal correspondence at this time is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on (571) 272-4835.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor K. Hwang  
January 10, 2005



JUSTINE R. YU  
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1/10/05